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Stanfill

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(54) **METHOD AND APPARATUS FOR UNDER MOUNTED SKIRT FOR A MOBILE HOME**

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E04B 1/343 (2006.01)

(52) **U.S. Cl.**
CPC ***E04B 1/34342*** (2013.01)

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CPC B60P 3/32; B60R 13/04; B60R 13/0869; B60R 2013/046; E04B 1/34315; E04B 1/34321
USPC 296/82, 164, 191, 180.4, 186.5, 184.1; 52/169.12; 280/768
See application file for complete search history.

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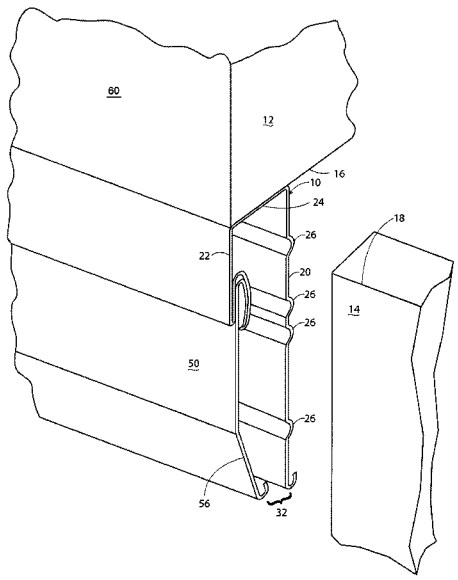
(57) **ABSTRACT**

A top rail secures skirting to a mobile home and comprises a panel back support portion and a top front rail connector portion spaced from one another by an under mount portion. The under mount portion extends between the top front rail connector portion and the panel back support portion. The top front rail connector portion and panel back support portion are generally parallel. The under mount portion extends transversely to the top front rail connector portion and the panel back support portion. The under mount portion is generally flat and allows mounting of the top rail to the underside of a mobile home. The top rail also includes a top front rail that is connectable with the top front rail connector portion. The top front rail and top front rail connector portion have interlocking geometry. The top front rail and top front rail connector portion are connectable.

20 Claims, 5 Drawing Sheets



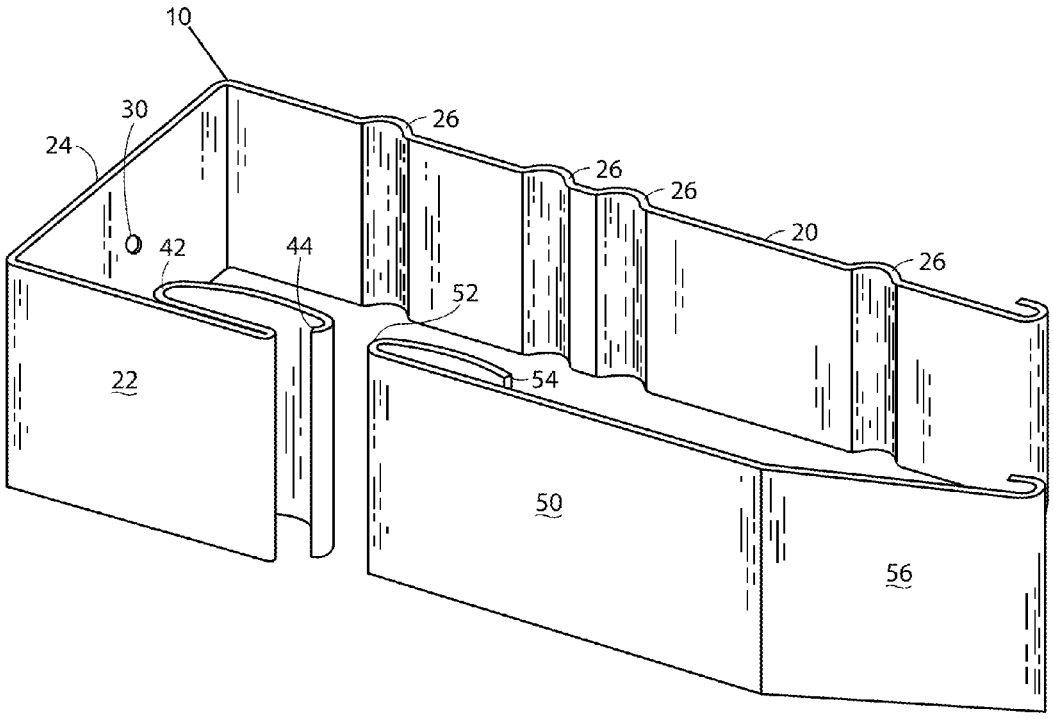


FIG. 1

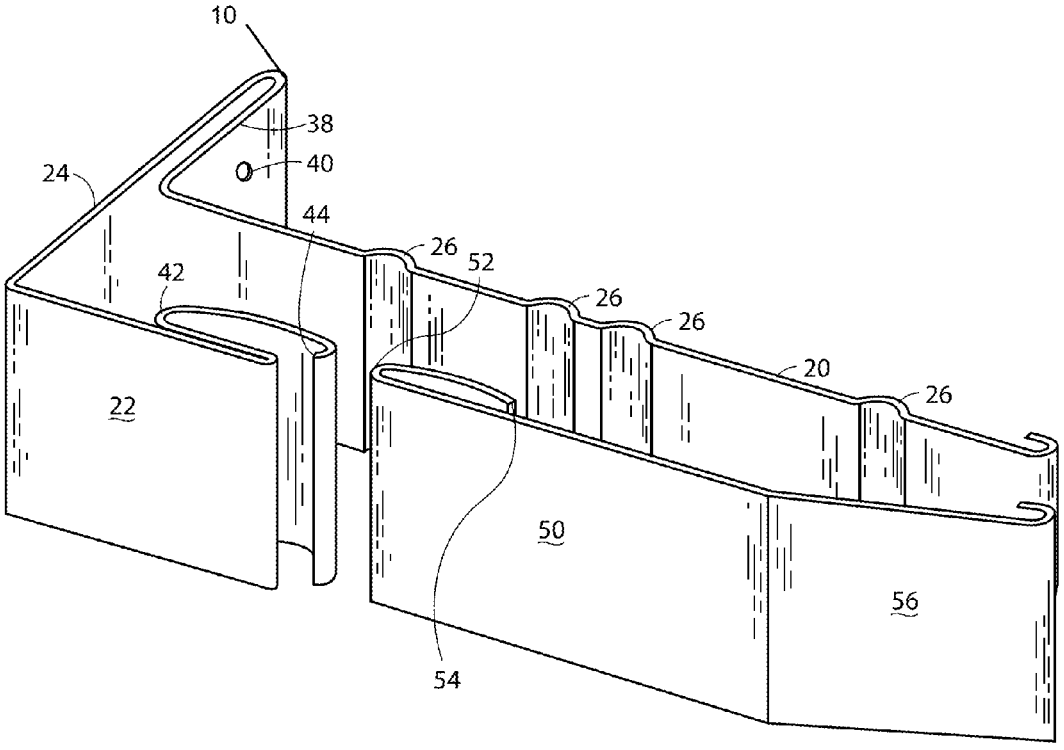


FIG. 2

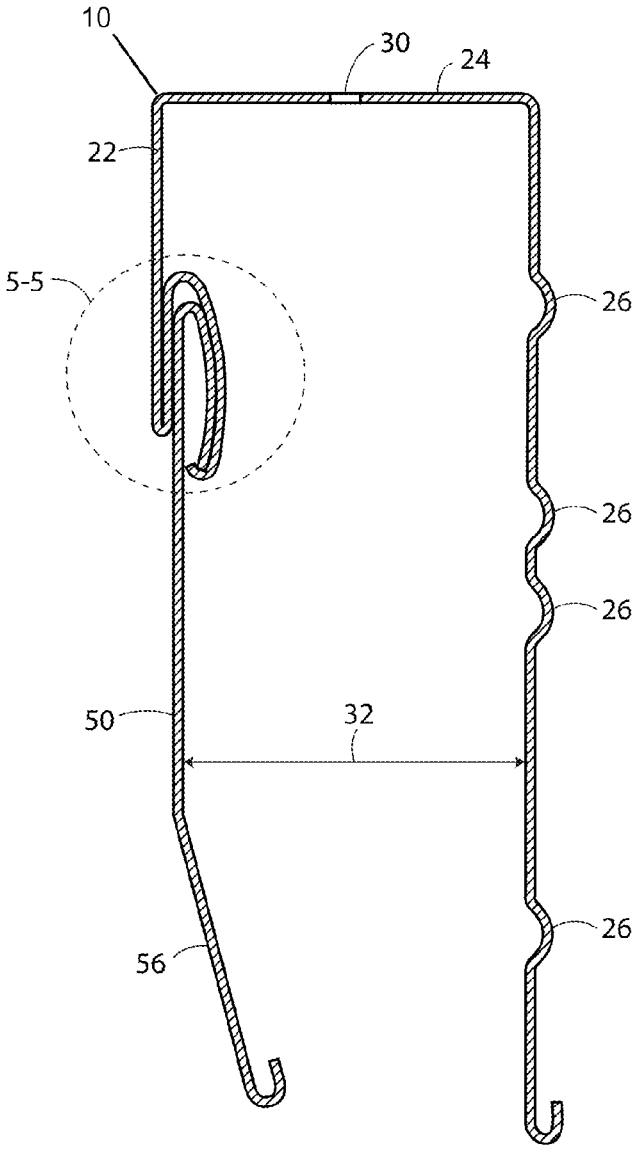


FIG. 3

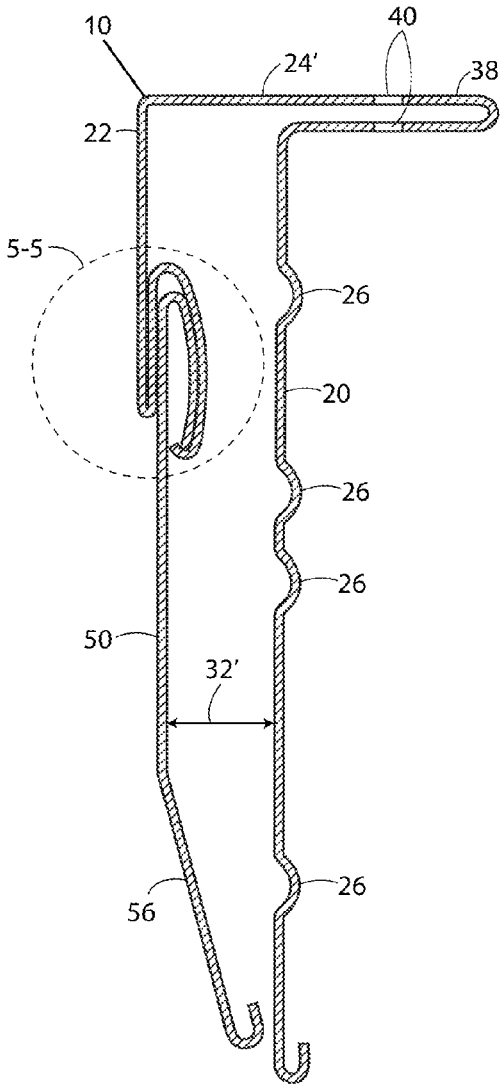


FIG. 4

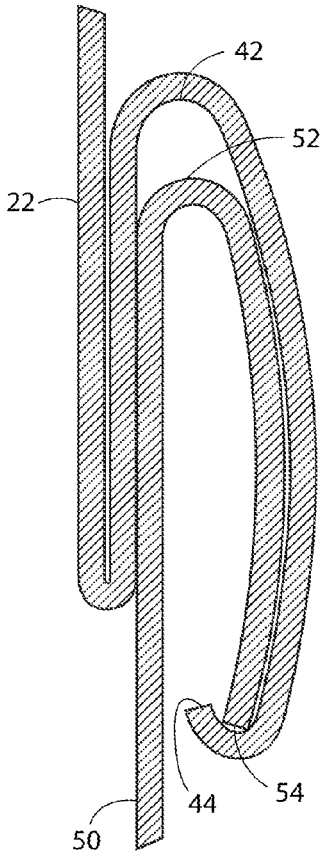


FIG. 5

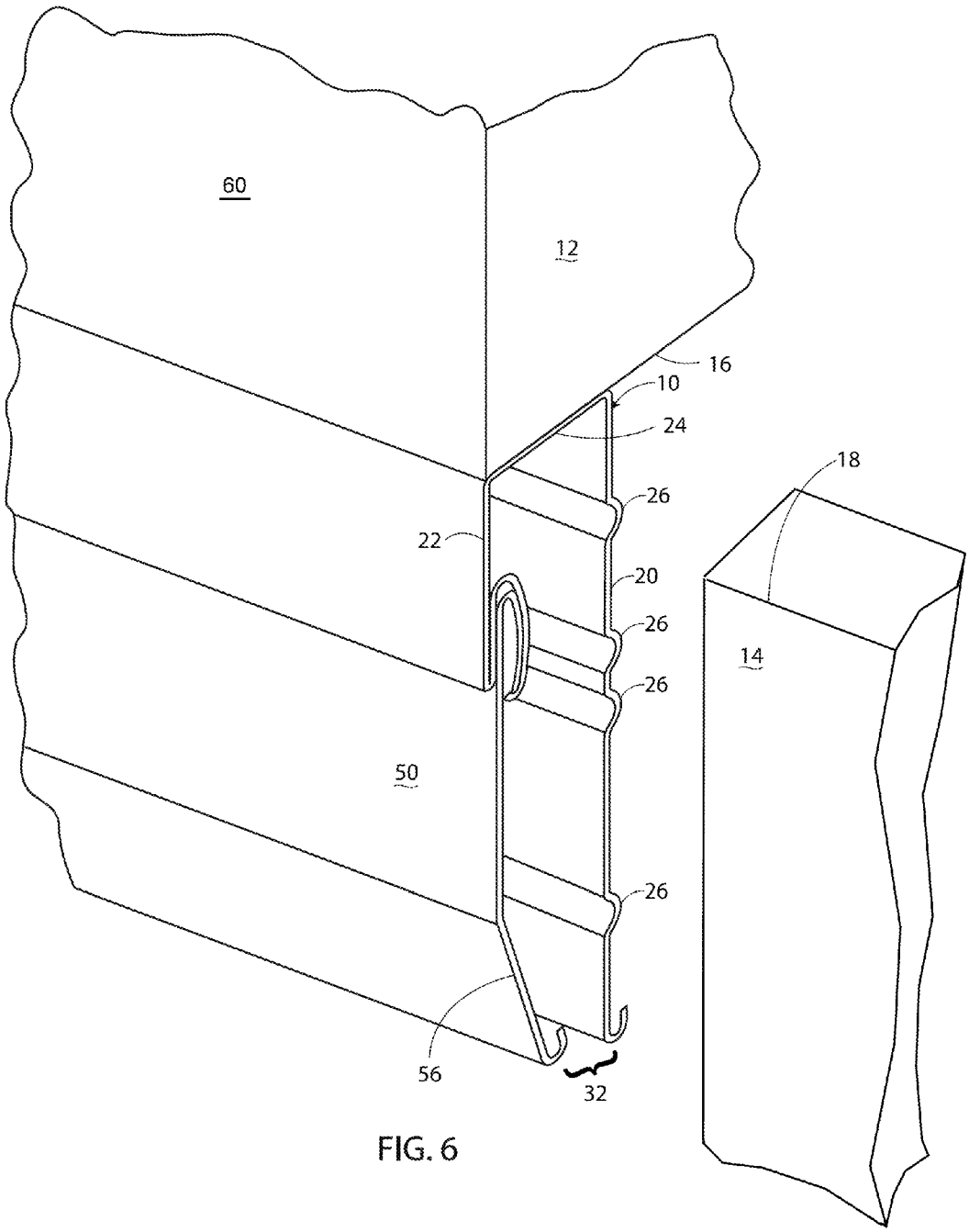


FIG. 6

METHOD AND APPARATUS FOR UNDER MOUNTED SKIRT FOR A MOBILE HOME

BACKGROUND AND SUMMARY

The disclosure relates to a method and apparatus for securing skirting to mobile homes. In particular, the discussion that follows relates to a top rail that has a panel back support portion and a top front rail connector portion that are spaced apart by an under mount portion. The under mount portion is configured to be secured to the underside of the mobile home such that the panel back support portion and top front rail connector portion depend therefrom. The spacing created by the under mount portion between the top front rail connector portion and panel back support portion is sufficient to receive a skirting panel therebetween. A top of the skirting panel may be inserted into the space between the top front rail connector portion and the panel back support portion and be held in place on the underside of the mobile home. A bottom of the skirting panel may be attached and secured to the ground with a bottom track. The bottom track may be secured into the ground with spikes. The skirting panel may extend between the top rail and the bottom track. The top rail may comprise a top front rail which connects or assembles with the top front rail connector portion to further secure the top of the skirting panel to the underside of the mobile home.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** shows a partial, exploded perspective view of a top rail;

FIG. **2** shows a partial, exploded view of an alternate embodiment of a top rail;

FIG. **3** shows a side, cross-sectional view of a top rail of FIG. **1**;

FIG. **4** shows a cross-sectional view of a top rail of the embodiment of FIG. **2**; and

FIG. **5** shows a partial, enlarged cross-sectional view of detail area **5-58** of FIGS. **3** and **4**.

FIG. **6** shows a partial perspective view of a mobile home with the top rail of FIGS. **1** and **3** secured thereto with a skirting panel shown in an exploded form relative thereto for the purposing of illustrating additional detail.

DETAILED DESCRIPTION

While the description that follows references a mobile home, the top rail described herein may be used in connection with any structure. Accordingly, the use of mobile home in the description that follows is for ease of illustration and should not be deemed limiting in any sense. Also, the terms left, right, top, bottom, front, and rear are used for the convenience of describing elements in the views of the drawings and are not meant to be limiting in any sense.

FIG. **6** shows the general arrangement of a top rail **10**, a mobile home **12**, and a skirting panel **14**. The top rail **10** enables the skirting panel **14** to be secured to a mobile home **12**. More specifically, the top rail **10** may be mounted to an underside **16** of the mobile home around a periphery of the mobile home. The top rail **10** anchors a top marginal edge **18** of the skirting panel to the mobile home. A bottom marginal edge (not shown) of the skirting panel may be anchored to the ground with a bottom track (not shown). The bottom track may be anchored to the ground with spikes (not shown). The bottom track generally comprises a channel and the bottom marginal edge of the skirting panel may be received in the channel. Together the top rail and bottom track hold the skirting panel in place. The top rail may be made from a weather resistant, resilient material, such as rigid PVC, which allows sufficient deflection for insertion of the skirting panel within the top rail. The thickness of the top rail material may be 0.050 inches to 0.055 inches.

Referring to FIGS. **1-5**, the top rail comprises 10 a panel back support portion **20** and a top front rail connector portion **22** which are spaced apart by an under mount portion **24**. The panel back support portion **20** and top front rail connector portion **22** are generally parallel to each other with the under mount portion **24** extending transversely therebetween. The under mount portion **24** may be perpendicular to the top front rail connector portion **22**. The under mount portion **24** may also be perpendicular to the panel back support portion **20**. The panel back support portion **20** supports a rear surface (i.e., not outwardly exposed surface) of the skirting panel **14**. The panel back support portion **20** may extend 7 inches from the under mount portion **24**. Generally speaking, the panel back support portion **20** is not visible when installed and would be obscured by the skirting panel **14** once installed in the top rail **10**. The panel back support portion **20** may have one or more grooves **26** extending longitudinally along the length of the panel back support portion. The grooves **26** may interlock with corresponding geometry on the back of the skirting panel **14** to aid in securing the skirting panel within the top rail **10**.

The under mount portion **24** is generally flat and adapted to be mounted to the underside **16** of the mobile home structure **12**. The under mount portion **24** may be formed with preformed holes **30** spaced along its longitudinal length to allow the use of mechanical fasteners to secure the top rail to the underside of a mobile home. Alternatively, the under mount portion **24** may be of sufficient thickness to allow mechanical fasteners to be directed through the under mount portion as desired, for instance, by mechanically driving screws or nails therethrough. In the embodiment of the top rail portion shown in FIGS. **1** and **3**, the under mount portion **24** is dimensioned in such a way to space the panel back support portion **20** from the top front rail connector portion **22** to allow the formation of a channel **32** of sufficient width to receive an insulated skirting panel **14**. For instance, the under mount portion may have a dimension of 2⅝ inches, thereby allowing an insulated panel to be inserted and held within the channel of the top rail. In the embodiment of FIGS. **2** and **4**, the under mount portion **24'** has an extension **38** formed by an overlap of the under mount portion. The extension **38** allows the effective width of the under mount portion to be reduced to thereby accommodate an uninsulated skirting panel (not shown). For instance, the partial doubling over of the under mount portion **24'** may create an effective channel **32'** with a dimension of 1 3/32 inches, although the under mount portion is 2⅝ inches. Thus, the extension may be roughly 1 17/32 inches. The extension **38** provides an access area to facilitate securing the top rail **10** to the underside of the mobile home **16**. Mechanical fasteners may be directed through the extension **38** and into the underside of the mobile home. The extension **38** may have preformed holes **40** or fasteners may be mechanically driven through the extension and under mount portion in securing the top rail to the underside of the mobile home.

The top rail **10** further comprises the top rail connector portion **22**. The top rail connector portion **22** is spaced from the panel back support portion **20** and is configured to receive a top front rail **50** discussed below to form an assembly comprising the top rail. The top front rail connector portion **22** may extend 2¼ inches from the under mount portion **24**. The top front rail connector portion **22** may be formed as a groove **42**. The top front rail connector portion **22** may be doubled

over itself as shown with detail in FIG. **5** to form the groove **42**. An edge of the groove **42** may have a tongue **44** that extends along the edge of the groove. The tongue **44** may aid in securing the top front rail **50** to the top rail connector portion **22**. The top front rail connector portion **22**, under mount portion **24**, and panel back support portion **20** may be formed from resilient materials to allow the top front rail connector portion and the panel back support portion to be deflectingly moved apart to allow insertion of the skirting panel **14** therebetween.

The top rail **10** also comprises the top front rail **50** that may be assembled with the top rail connector portion **22** to form the assembly comprising the top rail. The top front rail **50** depends from the top front rail connector portion **22** to provide additional mounting stability and structural integrity for the top rail **10** and the skirting panel **14**. Because the top front rail may be assembled with the top front rail connector portion to form the top rail, an installer may have better access to the under mount portion in the channel (for instance, the embodiment of FIG. **3**) or the extension (for instance, the embodiment of FIG. **4**), and manipulate tools and mechanical fasteners during installation, as opposed to configurations where the top front rail is integral and not detachable or assembleable with the top front rail connector portion (or integral with the under mount portion). By way of example and making reference to the embodiment of FIG. **3**, a commonplace, conventional ⅜" drive drill with a conventional drive extension may be used in the channel **32** to drive fasteners through the under mount portion during installation without interference of the panel back support portion and top front rail connector portion. Similarly, by way of example and making reference to the embodiment of FIG. **4**, a commonplace, conventional ⅜" drive drill with a conventional drive extension may be used outboard of the panel back support portion **20** to drive fasteners through the extension **38** and under mount portion **24'** during installation without interference of the panel back support portion. The top front rail **50** assembled with the top front rail connector portion **22** form a panel front support portion of the top rail **10**, thereby aiding in anchoring the skirting panel **14** to the mobile home. Once assembled, the top front rail and top front rail connector portion in combination may extend from the under mount portion roughly 6¾ inches. The top front rail **50** and top front rail connector portion **22** are ordinarily visible and would obscure the top marginal edge **18** of the skirting panel **14**. The top front rail **50** may have a boss **52** which may be received in the groove **42** of the top front rail connector portion **42**. As shown in the drawings, the boss **52** may be formed by doubling over a longitudinal end **54** of the top front rail **50**. Thus, the end **54** of the top front rail **50** may be engaged by the tongue **44** extending along the groove **42**, thereby further securing the top front rail to the top front rail connector portion. The top front rail **50** and top front rail connector portion **22** may be formed from resilient materials to allow the front rail and top front rail connector portion to be deflectingly moved apart to allow insertion of the top front rail boss **52** in the top front rail connector portion groove **42**. The top front rail **52** may have a depending portion **56** which is obtusely angled such that when the top front rail **50** is assembled with the top rail connector portion **22**, the depending portion **56** is angled toward the panel back support portion **20**. The angled arrangement biases the marginal top edge **18** of the skirting panel **14** against the panel back support portion **20**, thereby aiding in securing the skirting panel within the top rail. In the free state, the distal end of the depending portion **56** of the top rail of FIG. **3** may be $1\frac{11}{16}$ inches from the panel back support portion, and the distal end of the depending portion **56** of the top rail of FIG. **4** may be ¼ inches from the panel back support portion.

In installing the top rail **10**, an installer may place the under mount portion **24** of the unassembled top rail (i.e., the top front rail connector portion, under mount portion, and panel back support together without the top front rail) adjacent the underside **16** of the mobile home **10** around the periphery such that the top front rail connector portion **22** is flush with exposed face panels **60** of the mobile home and structural members of the underside **16** of the mobile home. In this fashion, the facade **60** of the mobile home adjacent to the bottom foundation of the mobile home may be flush and aesthetically seamless with the outer surface of the top front rail connector portion **22**. Next, the installer may mount the unassembled top rail to the underside of the mobile home with mechanical fasteners. Depending upon the embodiment of the top rail, the installer may direct mechanical fasteners through the under mount portion **24** by accessing the under mount portion in the channel **32** (i.e., in FIG. **3**) or by directing mechanical fasteners through the extension **38** outboard of the panel back support portion **20** (i.e., FIG. **4**). With the unassembled top rail in place along the peripheral bottom edge of the mobile home, skirting panels **14** may be inserted in the channel (FIG. **3**, "**32**", FIG. **4**, "**32**"). The skirting panels **14** may be inserted in the space formed between the top front rail connector portion **22** and the panel back support portion **20**. By making triangular cuts in the top front rail connector portion and under mount portion, the top rail may be bent around corners of the mobile home as needed during installation. Once the unassembled top rail is installed along the peripheral edges of the bottom of the mobile home, the top front rail **50** may be assembled with the top front rail connector portion **22**. The boss **52** of the top front rail **50** may be inserted into the groove **42** of the top front rail connector portion **22** and snapped in place such that the distal end **54** of the top front rail may lock with or engage the tongue **44** of the groove **42** of the top rail connector portion **20**. The top front rail may be assembled with the top front rail connector portion prior to installation of the skirting panels, as may be desired depending upon the application.

Although the drawings show the top front rail with a boss and the top front rail connector portion having a groove, the cooperating interlocking geometry may be reversed and the top front rail may be formed with a groove and the top front rail connector portion may have a boss. The top front rail, under mount portion, and panel back support portion may be formed monolithically. The top front rail, under mount portion, and panel back support portion may be formed from a continuous extrusion. The top front rail may also be formed from a continuous extrusion.

Although the top rail described herein may be used in connection with skirting on the underside of the mobile home, it should be appreciated that the top rail may be used in other applications including the mounting of skirting to the underside of other structures and the mounting of other panels similar to skirting used in a mobile home. The use of the top rail in the description was for purposes of illustration in the context of the mobile home application and is not to be interpreted in any limiting sense.

In view of the foregoing, it will be seen that several advantages are achieved and attained. The embodiments were chosen and described to provide the best examples and their practical application to thereby enable others skilled in the art to best utilize the various embodiments and with various modifications as are suited to the particular use contemplated. As various modifications could be made in the constructions

and methods herein described and illustrated without departing from the scope of the invention, it is intended that all matter contained in the foregoing description or shown in the accompanying drawings shall be interpreted as illustrative rather than limiting. Thus, the breadth and scope of the present invention should not be limited by any of the above-described exemplary embodiments, but should be defined only in accordance with the following claims appended hereto and their equivalents.

What is claimed is:

1. A top rail for securing skirting to a mobile home comprising:

a panel back support portion and a top front rail connector portion spaced from the panel back support portion by an under mount portion, the under mount portion extending between the top front rail connector portion and the panel support portion, the top front rail connector portion and panel back support portion being generally parallel with the under mount portion extending transversely to the top front rail connector portion and the panel back support portion, the under mount portion being generally flat and configured to allow mounting of the top rail to an underside of the mobile home; and

a top front rail configured to be assembled with the top front rail connector portion;

wherein the top front rail and top front rail connector portion have interlocking geometry such that the top front rail is releasably attachable with the top front rail connector portion in a manner where the top front rail is spaced from the panel back support portion a distance sufficient to accommodate skirting placed between the panel back support portion and the top front rail.

2. The top rail of claim **1**, wherein the interlocking geometry of the top front rail and top front rail connector portion comprises a groove formed on one of the top front rail and top front rail connector portion and a cooperating boss formed on the other of the top front rail and the top front rail connector portion.

3. The top rail of claim **1**, wherein the under mount portion creates a space between the top front rail connector portion and panel support portion of sufficient dimension to receive a skirting panel.

4. The top rail of claim **3**, wherein the skirting panel is insulated.

5. The top rail of claim **1**, wherein the under mount portion has holes to receive mechanical fasteners for mounting the top rail to the underside of the mobile home.

6. The top rail of claim **5**, wherein the under mount portion holes are within the space formed between the top front rail connector portion and the panel support portion.

7. The top rail of claim **5**, wherein the holes are positioned outboard of the panel support portion.

8. The top rail of claim **7**, wherein the under mount portion has an extension configured to allow mounting of the top rail to the underside of the mobile home.

9. The top rail of claim **1**, wherein the top front rail connector groove comprises a tongue configured to engage the top front rail when the top front rail is inserted into the groove of the top front rail connector portion.

10. The top rail of claim **1**, wherein the top front rail connector, the under mount portion, and the panel support portion are formed monolithically.

11. A top rail adapted to be installed on the underside of a structure to form a channel extending along a bottom edge of the structure, the channel having opposing sides extending along a length of the channel and at least in part defining an opening into the channel, a first of the channel side forming a panel back support portion and the second of the channel sides being spaced from the first along a width of the channel, the second of the channel sides forming a panel front support portion, the channel sides being sufficiently resilient to be deflectingly moved to an apart position to allow a skirting panel to be inserted through the opening into the channel, the width of the channel being defined by an under mount portion, the under mount portion being configured to be attached to the underside of the structure, the panel front support portion comprising a top front rail and a top front rail connector portion, the top front rail and top front rail connector portion having interlocking geometry allowing the top front rail to be assembled with the top front rail connector portion to form the panel front support portion;

wherein the top front rail is releasably attachable with the top front rail connector portion in a manner where the top front rail is spaced from the panel back support portion a distance sufficient to accommodate skirting placed between the panel back support portion and the top front rail.

12. The top rail of claim **11**, wherein the interlocking geometry of the top front rail and top front rail connector portion comprises a groove formed on one of the top front rail and top front rail connector portion and a cooperating boss formed on the other of the top front rail and the top front rail connector portion.

13. The top rail of claim **11**, wherein the under mount portion creates a space between the top front rail connector portion and panel support portion of sufficient dimension to receive a skirting panel.

14. The top rail of claim **13**, wherein the skirting panel is insulated.

15. The top rail of claim **11**, wherein the under mount portion has holes to receive mechanical fasteners for securing the top rail to the underside of the structure.

16. The top rail of claim **15**, wherein the under mount portion holes are within a space formed between the panel front support portion and the panel back support portion.

17. The top rail of claim **15**, wherein the holes are positioned outboard of the panel back support portion.

18. The top rail of claim **11**, wherein the under mount portion has an extension configured to allow mounting of the top rail to the underside of the structure.

19. The top rail of claim **11**, wherein the top front rail connector portion comprises a groove with a tongue formed on the edge of the groove configured to engage the top front rail when the top front rail is inserted into the groove of the top front rail connector portion.

20. The top rail of claim **11**, wherein the top front rail connector, the under mount portion and the panel support portion are formed monolithically.

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